

Search History

STN

HCAPLUS, JAPIO, INSPEC, USPATFULL
10/16/2007

=> d his

(FILE 'HOME' ENTERED AT 14:26:01 ON 17 OCT 2007)

FILE 'HCAPLUS, INSPEC, JAPIO, USPATFULL, USPATOLD, USPAT2' ENTERED AT 14:26:47 ON 17 OCT 2007

L1 148 S (CRYSTAL?) (8A) (MELAMINE(8A)MELT# OR MELAMINE(8A)LIQUID#)
L2 2920057 S (COOL? OR REFRIGERAT?)
L3 918970 S (BELOW RO UNDER OR BENEATH OR DECREAS? OR LOWER? OR REDUC?) (8
L4 1050 S (SPRAY? (8A)MELAMINE)
L5 828389 S (CO2 OR CARBON(W)DIOXIDE)

=> s l1 and l2 and l3 and l4 and l5

L6 4 L1 AND L2 AND L3 AND L4 AND L5

=> d l6 1-4 abs, bib

L6 ANSWER 1 OF 4 USPATFULL on STN

AB The invention relates to a method for producing melem-free melamine by means of aqueous processing of a melted mass of melamine which is obtained using a high-pressure method. According to the inventive method, the melted mass of melamine is quenched by means of an aqueous solution containing alkalis, following the isolation of the off-gases, and is directly transferred into an aqueous alkaline melamine solution, out of which the melamine is then crystallized. The invention thus enables melamine to be obtained, with a melam content of less than 1000 ppm and a melem content of less than 50 ppm. The invention also relates to a quenching agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 2005:152314 USPATFULL
TI Method for roducing melem-free melamine and queching agents
IN Schroder, Frank, Albrechtshain, GERMANY, FEDERAL REPUBLIC OF
Ruech, Wolfgang, Taiskirchen, AUSTRALIA
Neumuller, Christoph, Linz, AUSTRALIA
Koglgruber, Ferdinand, Linz, AUSTRALIA
Wagner, Hans Christian, Wien, AUSTRALIA
PI US 2005131228 A1 20050616
US 7176309 B2 20070213
AI US 2003-495619 A1 20021114 (10)
WO 2002-DE4251 20021114
PRAI AT 2001-1807 20011116
DE 2003-102 20020625
DT Utility
FS APPLICATION
LREP CHRISTIE, PARKER & HALE, LLP, PO BOX 7068, PASADENA, CA, 91109-7068, US
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 358

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 2 OF 4 USPATFULL on STN

AB The invention relates to multicrystalline melamine powder having the following properties:

specific surface area: 0.7-5 m.sup.2/g

content of oxygen-containing components<0.7 weight %

APHA colour less than 17

melam: higher than 1.5 weight %

34/541, 796

Examiner's Notes

11903 (02/08/2006)

IDS (08/09/2005)

IDS (09/25/2007)

Amendment to Specification

Page 1, after the title, please insert the following:

This application is a 371, US National phase of international application PCT/NL04/00062 ^{28 January 2004} 02/28/2004, which designated the U.S. and claims benefit of NL 1022764, dated 24 February 2003, the entire content of which is hereby incorporated by reference.

~~6 (crystallize or crystallizes or crystallized)~~

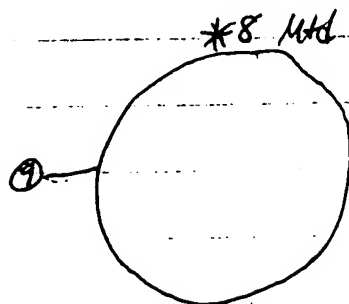
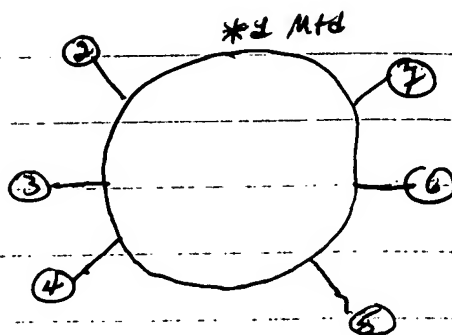
S (crystal?) (10a) (melamine (8a) melt# or melamine (8a) liquid#)

S (cool? or refrigerat?)

S (below or under or beneath or decrease? or lower? or reduce?) (10a) (temperature or ^{or freeze} crystal?) (8a) (8a)

S (spray? (8a) melamine)

S (CO₂ or carbon(2) dioxide)



The invention further relates to amino-formaldehyde resin in which multicrystalline melamine with a melam content higher than 1.5 weight % is used.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 2003:24314 USPATFULL
TI Crystalline melamine and its use in amino-formaldehyde resins
IN Aarts, Veronika M.L.J., Beek, NETHERLANDS
Tjioe, Tjay T., Sittard, NETHERLANDS
Liekelema, Koert, Beek, NETHERLANDS
PI US 2003018158 A1 20030123
US 6706856 B2 20040316
AI US 2002-136447 A1 20020502 (10)
RLI Continuation of Ser. No. WO 2000-NL715, filed on 5 Oct 2000, UNKNOWN
PRAI NL 1999-1013456 19991102
DT Utility
FS APPLICATION
LREP PILLSBURY WINTHROP, LLP, P.O. BOX 10500, MCLEAN, VA, 22102
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 491

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 3 OF 4 USPAT2 on STN

AB The invention relates to a method for producing melem-free melamine by means of aqueous processing of a melted mass of melamine which is obtained using a high-pressure method. According to the inventive method, the melted mass of melamine is quenched by means of an aqueous solution containing alkalis, following the isolation of the off-gases, and is directly transferred into an aqueous alkaline melamine solution, out of which the melamine is then crystallized. The invention thus enables melamine to be obtained, with a melam content of less than 1000 ppm and a melem content of less than 50 ppm. The invention also relates to a quenching agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 2005:152314 USPAT2
TI Method for producing melem-free melamine and quenching agents
IN Schroder, Frank, Albrechtshain, GERMANY, FEDERAL REPUBLIC OF
Ruech, Wolfgang, Taiskirchen, AUSTRIA
Neumuller, Christoph, Linz, AUSTRIA
Koglgruber, Ferdinand, Linz, AUSTRIA
Wagner, Hans Christian, Vienna, AUSTRIA
PA AMI - Agrolinz Melamine International GmbH, Linz, AUSTRIA (non-U.S. corporation)
PI US 7176309 B2 20070213
WO 2003045927 20030605
AI US 2002-495619 20021114 (10)
WO 2002-DE4251 20021114
20041104 PCT 371 date
PRAI AT 2001-1807 20011116
DE 2002-10229100 20020625
DT Utility
FS GRANTED
EXNAM Primary Examiner: Balasubramanian, Venkataraman
LREP Christie, Parker & Hale, LLP
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 371

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 4 OF 4 USPAT2 on STN

AB Multicrystalline melamine powder having a specific area of from 0.7-5 m.sup.2/g, content of oxygen-containing components of less than 0.7 wt %, an APHA colour less than 17 and a melam content higher than 1.5 wt %. The multicrystalline melamine powder may be used in amino-formaldehyde resins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 2003:24314 USPAT2
TI Crystalline melamine and its use in amino-formaldehyde resins
IN Aarts, Veronika M. L. J., Beek, NETHERLANDS
Tjioe, Tjay T., Sittard, NETHERLANDS
Liekelema, Koert, Beek, NETHERLANDS
PA DSM N.V., Heerlen, NETHERLANDS (non-U.S. corporation)
PI US 6706856 B2 20040316
AI US 2002-136447 20020502 (10)
RLI Continuation of Ser. No. WO 2000-NL715, filed on 5 Oct 2000
PRAI NL 1999-1013456 19991102
DT Utility
FS GRANTED
EXNAM Primary Examiner: Truong, Duc
LREP Pillsbury Winthrop LLP
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 485

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>

West
10/17/2007

Refine Search

Search Results -

Terms	Documents
WO-9620933-A1.did.	0

Database:

US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search:

L3

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Search History

DATE: Wednesday, October 17, 2007 [Purge Queries](#) [Printable Copy](#) [Create Case](#)

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=EPAB; PLUR=YES; OP=OR</i>			
<u>L3</u>	WO-9620933-A1.did.	0	<u>L3</u>
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR</i>			
<u>L2</u>	9620933	1	<u>L2</u>
<u>L1</u>	9620933	1	<u>L1</u>

END OF SEARCH HISTORY

First Hit**End of Result Set**

L1: Entry 1 of 1

File: DWPI

Jul 11, 1996

DERWENT-ACC-NO: 1996-333926

DERWENT-WEEK: 199633

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TITLE: Manufacture of melamine from urea uses increased system pressure - for easier recovery of melamine, carbamate and ammonia, the melamine product can be formed as aq soln free of solids for easier handling

INVENTOR: LEE, J M

PATENT-ASSIGNEE: LEE J M (LEEJI)

PRIORITY-DATA: 1995WO-US00036 (January 3, 1995)

PATENT-FAMILY:

	PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/>	<u>WO 9620933 A1</u>	July 11, 1996	E	020	C07D251/60
<input type="checkbox"/>	<u>AU 9515972 A</u>	July 24, 1996		000	C07D251/60

DESIGNATED-STATES: AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB GE HU JP KP KR KZ
LK LU MG MN MW MX NL NO NZ PL PT RO RU SD SE SK UA US UZ VN AT BE CH DE DK ES FR GB
GR IE IT LU MC NL OA PT SE

CITED-DOCUMENTS:US 3682911; US 4156080 ; US 4565867

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
WO 9620933A1	January 3, 1995	1995WO-US00036	
AU 9515972A	January 3, 1995	1995AU-0015972	
AU 9515972A	January 3, 1995	1995WO-US00036	
AU 9515972A		WO <u>9620933</u>	Based on

INT-CL (IPC): B01D 3/00; C07D 251/60

ABSTRACTED-PUB-NO: WO 9620933A

BASIC-ABSTRACT:

A process for manufacturing melamine from urea. Urea (12) and fluidising ammonia are fed to a reactor (14) at a pressure from 1.4 MPa to 2.0 MPa and a temperature which substantially converts the urea in the presence of a catalyst to melamine and forms an effluent stream of melamine, ammonia and carbon dioxide. This stream is quenched to form a vapour-liquid mixture, free of solids, and this is separated into a concentrated aqueous melamine product stream free of solids, ammonia and carbon

dioxide and a high pressure vapour stream free of urea and melamine. The high pressure vapour stream is contacted with an aqueous ammonia stream in an absorption zone (71) refluxed with liquid ammonia to form a conc. aqueous ammonium carbamate stream and an overhead ammonia vapour stream free of carbon dioxide. This is condensed to form a liquid ammonia stream and a portion is vapourised to form the fluidising ammonia for the reactor. Also claimed is apparatus for manufacturing melamine from urea.

USE - For manufacturing melamine from urea.

ADVANTAGE - The recovery of melamine, carbamate and ammonia is simplified by increasing the system pressure, and this also produces a carbamate solution suitable for recycle to urea production without concentration. The melamine product can be formed as an aqueous solution free of solids for easier handling.

ABSTRACTED-PUB-NO: WO 9620933A
EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.1/1

DERWENT-CLASS: A41 E13
CPI-CODES: A01-E01; E07-D13A; E11-Q01;